

VIRAL RECOMBINASES, RELATED ARTICLES, AND METHODS OF USE  
THEREOF

ABSTRACT OF THE DISCLOSURE

[00146] A Herpes simplex virus (HSV) recombinase comprises a purified or isolated alkaline nuclease and a single stranded DNA binding protein. In HSV-1, the alkaline nuclease is the UL12 protein and the single stranded DNA binding protein is the ICP8 protein. The HSV recombinase can be purified from an *in vitro* expression system or can be expressed in an appropriate vector or vectors wherein the DNAs encoding the polypeptides are operatively linked to expression control sequences. Methods of use of the HSV recombinase include cloning, treating cells and organisms, and producing transgenic animals. The HSV recombinase can be in the form of a kit useful for cloning.